Power Association of Northern California

Monthly Luncheon Meeting

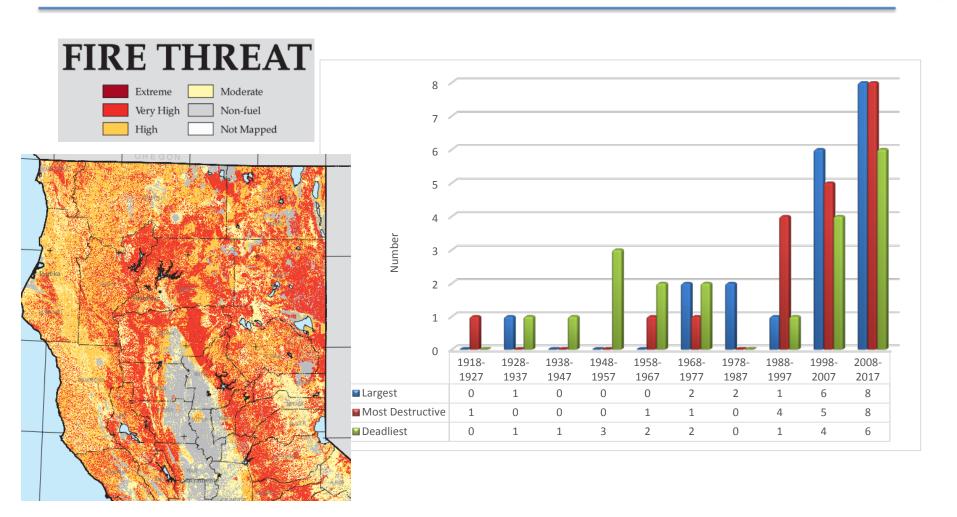
Robert B. Weisenmiller Chair, California Energy Commission

December 1, 2017



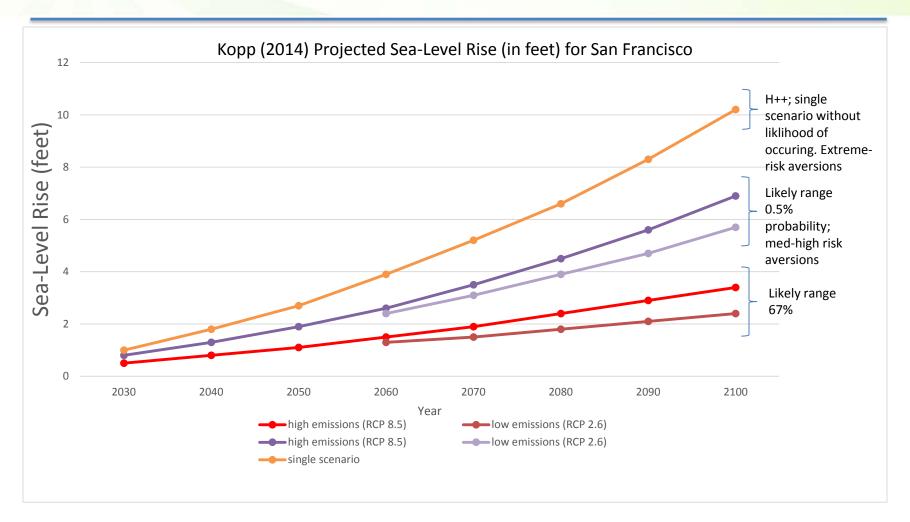


Top 20 Largest, Most Destructive, and Deadliest Wildfires in Last Century





State of California Sea-Level Rise Guidance: 2018 Update





California's Climate Strategy

CALIFORNIA CLIMATE STRATEGY

An Integrated Plan for Addressing Climate Change



VISION

Reducing Greenhouse Gas Emissions to 40% Below 1990 Levels by 2030

GOALS

50% reduction in petroleum use in vehicles



50% renewable electricity



Double energy efficiency savings at existing buildings

Carbon sequestration in the land base

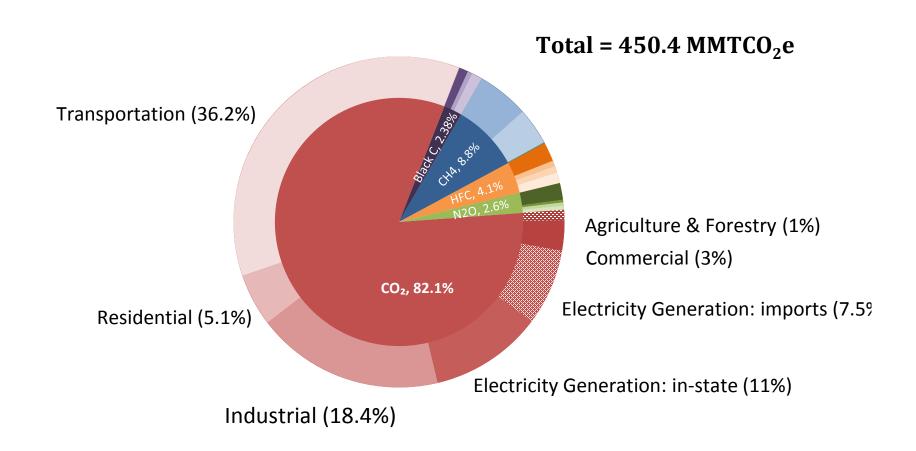




Reduce short-lived climate pollutants



2015 California GHG by Source





- 50% renewable energy by 2030
- Doubling energy efficiency savings by 2030
- Encourage widespread transportation electrification
- Integrated resource planning to reduce greenhouse gas emissions
- Address barriers for low-income residents & disadvantaged communities
- Explore grid regionalization



Energy Commission Barriers Study – EE and Renewables

"Low-Income Barriers Study: Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities."

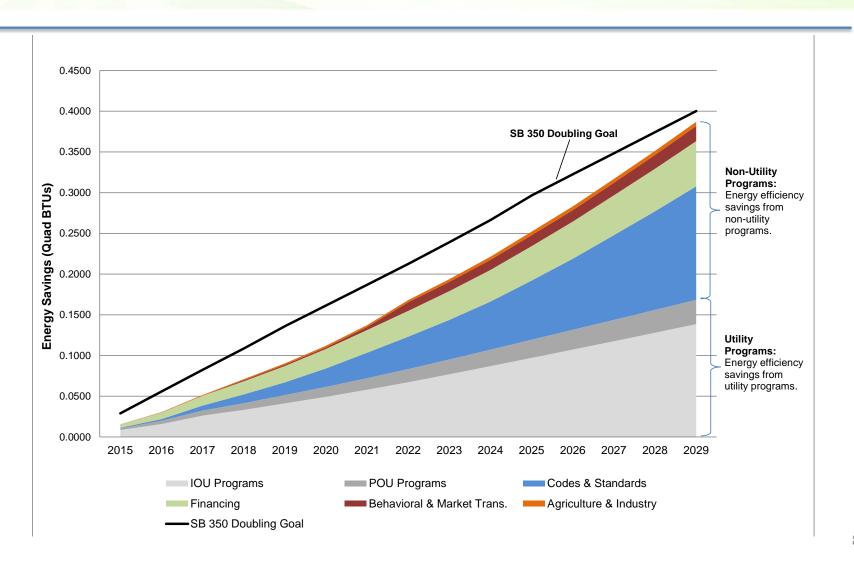
- Adopted December 14, 2016

Principal Recommendations

- Establish a coordinating task force
- Enable the economic advantages for community solar
- Strategize on effective green workforce and education goals in disadvantaged communities
- Continue developing a series of energy upgrade financing pilot programs
- Collaboration to establish common metrics and collect and use data systematically across programs

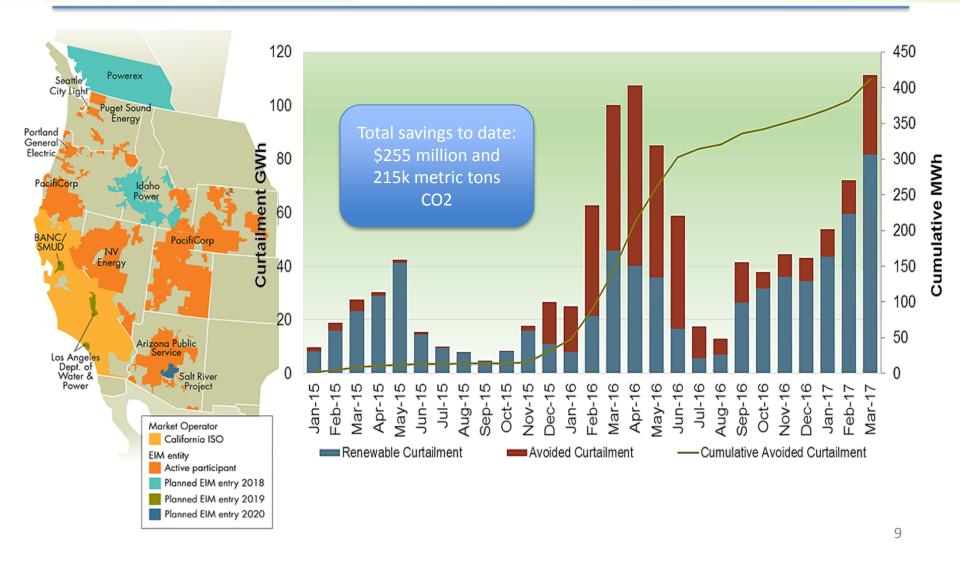


SB 350 Doubling Estimates



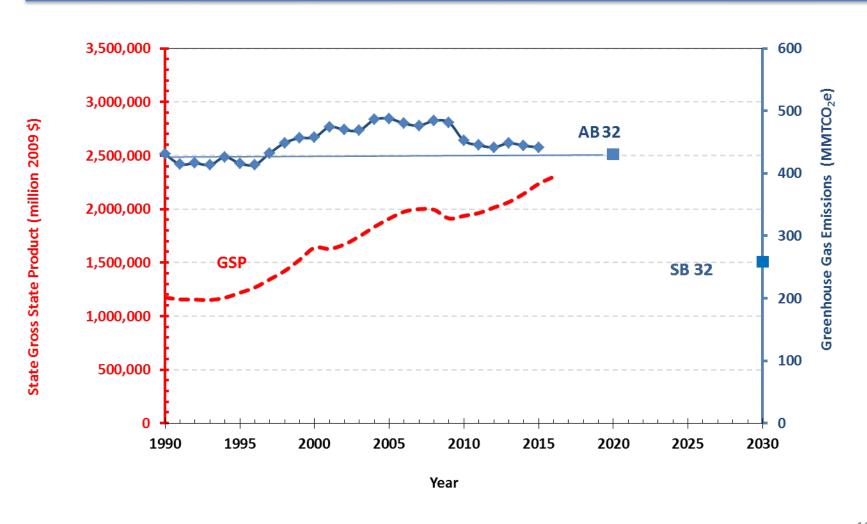


Energy Imbalance Market Helps Avoid Curtailment





Total GHG emissions and GSP since 1990





The Climate Challenge requires Global Actions

- California accounts for just 1% of global GHG emissions, thus we cannot act alone.
- California can leverage its leadership role to show other nations that it is possible to lower GHG emissions while building the economy.
- California cleantech companies have significant international opportunities.
- Under 2 MOU limit GHG emissions to 80-95% 1990 levels or 2 annual MT per capita by 2050
 - 205 signatories representing 1.3 billion people and \$30 trillion in GDP (40% global GDP)